



TO: The Honorable John C. Carney, Jr., Governor
Jeffrey W. Bullock, Secretary, Department of State
Dr. Susan Bunting, Secretary, Department of Education
Robert Coupe, Secretary, Department of Safety and Homeland Security
Shawn Garvin, Secretary, Department of Natural Resources and Environmental Control
Dr. Kara Odom Walker, Secretary, Department of Health and Social Services

VIA: Jennifer Cohan, Secretary, Department of Transportation *JC*

FROM: John Sisson, 2018 Pedestrian Council Chair and Chair of WILMAPCO *JS*

DATE: February 12, 2019

SUBJECT: Pedestrian Council 2018 Annual Report

As the 2018 Chair of the Advisory Council on Walkability and Pedestrian Awareness (Pedestrian Council), I am pleased to present the Pedestrian Council 2018 Annual Report. This report is in accordance with Executive Order 54 directing the Council to provide an annual report of its activities and recommendations to the Office of the Governor and other concerned agencies.

Some of the activities of the Pedestrian Council in 2018 included the observance of Pedestrian Safety Awareness Month; continued education and outreach; continued research on best practices across the country and abroad; continued monitoring of DelDOT's Pedestrian Safety Audits; and in-depth discussions on how to make walking safer for everyone in Delaware.

Please do not hesitate to contact me if you have any questions about the report or the Pedestrian Council in general. Thank you for your support in improving pedestrian safety in Delaware.

2018

Pedestrian Council Annual Report



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EXECUTIVE SUMMARY

The Advisory Council on Walkability and Pedestrian Awareness (hereinafter referred to as “Pedestrian Council”) was reestablished on October 12, 2015 to address concerns related to the high number of pedestrian fatalities, lack of awareness about pedestrian laws, and desire to improve the walkability of the state. The Council was charged with exploring ways to make walking a safe, convenient, efficient, and comfortable means of transportation.

John Sisson, Chair of the Wilmington Area Planning Council (WILMAPCO) and CEO of the Delaware Transit Corporation (DTC) and Nicole Majeski, Deputy Secretary of DelDOT, served as chair and co-chair respectively of the Council for 2018.

The Council met 4 times in 2018 while its three subcommittees met a total of 10 times. The three subcommittees of the Council are: the Built Environment Subcommittee, Education and Enforcement Subcommittee, and Legislative and Policy Subcommittee.

KEY ACCOMPLISHMENTS

Pedestrian Safety Awareness Month

For the second year in a row, and upon the request of the Council, Governor John Carney Jr. declared October 2018 as Pedestrian Safety Awareness Month for the State of Delaware.

The month of October was chosen to coincide with Walk to School Day (first Wednesday of October every year) and White Cane Safety Day (October 15th). Delaware also sees an uptick in pedestrian fatalities starting the month of October as the days get shorter. Pedestrians are more vulnerable on the roadways when they walk in the dark.

To help launch Pedestrian Safety Awareness Month, the Office of Highway Safety (OHS) held a public event on October 4th at the Delaware State Police (DSP) Troop 6 on Kirkwood Highway, Wilmington. Speakers included, Secretary Robert Coupe of the Delaware Department of Safety and Homeland Security (DSHS), Senator Anthony Delcollo, DSP Superintendent Colonel Nathaniel McQueen Jr., Pedestrian Council President John Sisson, and Dr. Sherry Sixta, Associate Medical Director of Christiana Care Health System.

The Council will continue to get a yearly proclamation from the Governor and will also work on getting the Pedestrian Safety Awareness Month on the General Assembly’s calendar.

Education and Outreach

Council and subcommittee members continue to seize every opportunity to educate the public on how to make walking safer for everyone. Be it through mainstream media, social media, public events or community outreach.

What can you do to stay safe as a pedestrian?

- Cross at crosswalks or cross roads with signals and take the time to cross safely;
- When walking at night, wear light colored clothing or use a flashlight or reflective items;
- Use sidewalks when available;
- Always walk facing traffic.

What can you do as a driver?

- Yield to pedestrians;
- Slow down in heavily traffic pedestrian areas;
- Always keep an eye out for pedestrians.

Pedestrian Safety Audits

In 2016, the Council recommended that DelDOT conducts at least three pedestrian corridor audits per year and that necessary improvements be programmed into the Capital Transportation Plan within one year of the completion of the audit.

On July 24, 2018, engineers from DelDOT and Pennoni Associates provided the Council an update on the status of pedestrian safety improvements on US 13 from US 40 to Memorial Drive. The improvements will include, among others, sidewalk connections, median barriers and intersection improvements. This project came out of an earlier conducted pedestrian safety audit.

The Council will continue to monitor pedestrian safety audit initiatives by DelDOT.

(Please see page 15 for more on Pedestrian Safety Audits.)

Research

The Council funded McCormick Taylor Associates to conduct research on best practices across the country and other pedestrian safety programs.

Research is being done on the possibility of replicating the Share the Road Safety Class being implemented in Portland/Multnomah County,

Oregon and Las Vegas/Clark County, Nevada. This program targets pedestrians, bicyclists and vehicle drivers that are ticketed for various offenses related to pedestrian safety. This class is a one-time opportunity for offenders to have their tickets dismissed in exchange for an educational experience on how non-motorized and motorized users of the roadways should interact with each other.

The pedestrian portion of the Delaware Code Title 21 is also being looked at to see if changes are needed. For example, Title 21 §4143 (c) states: *“Between adjacent intersections at which traffic-control signals are in operation, pedestrians shall not cross at any place except in a marked crosswalk.”* However, the word “adjacent” is not clearly defined.

Funding of Reflective Items and Educational Materials

The Council approved the funding of reflective items and educational materials for distribution to the public. Items were given to law enforcement officers for handing out to pedestrians. DelDOT and OHS also distributed the materials at the following dates and events:

- Safe Summer Day 2018, June 8th, Brecknock Park in Camden
- Delaware Middle Schools Cross Country Championship, October 25th at the Browns Branch County Park in Harrington



INFORMATION PRESENTED TO AND REVIEWED BY THE PEDESTRIAN COUNCIL

To keep abreast of pedestrian related issues, policies and projects, the Pedestrian Council regularly invites presenters to its meetings.

DeIDOT's Sidewalk Maintenance Policy by Brian Urbanek, Assistant Director of Maintenance and Operations, DeIDOT

Mr. Urbanek explained DeIDOT's responsibility as far as sidewalk maintenance is concerned. DeIDOT does not maintain sidewalks owned or maintained by municipalities; those located in subdivisions; those privately owned; and those maintained by others. DeIDOT maintains the remaining sidewalks located in the state right-of-way.

He discussed how maintenance can include structural repairs, vegetation control and snow removal and the criteria for doing such maintenance work. The full presentation can be viewed at:

https://www.deldot.gov/Programs/pedestrian_council/pdfs/2018/Apr/SidewalkMaintenancePolicy2018-04-24.pdf



Mobility in Motion and Crowdsourcing Tools by Marcia Scott, Associate Policy Scientist, Institute of Public Administration, University of Delaware

Ms. Scott and her team presented Phase 1 of a study to look at the state of mobility management in Delaware and specialized transportation among various human services.

It looked at the need for a comprehensive strategy to address the changing landscape of mobility coordination and management in Delaware. It also looked at initiatives to reduce cost pressure in all modes of transportation especially paratransit. There is a broader range of population to be served - not just persons with disabilities and the elderly. Now, there are veterans, underprivileged persons, household with no cars, people who need non-emergency medical treatment to get to their doctor's appointment, etc. The full presentation can be viewed at:

https://www.deldot.gov/Programs/pedestrian_council/pdfs/2018/Jul/MobilityinMotion.pdf





US 13 in New Castle.

Pedestrian Safety Improvements Update (US 13, from US 40 to Memorial Drive) by Mark Luszczyk and Mark Tudor of DeDOT and Kyle Clevenger and Mike Steimer of Pennoni

This project area of US 13 has a history of high pedestrian fatalities and injuries. Thirteen percent of all pedestrian fatalities in Delaware from 2007 to 2016 occurred within the study corridor (31 of 240 deaths).

This \$26 million project will include sidewalk connections, signals, median barriers and others. Additional signalized crossings will be put strategically in areas that generate pedestrian trips. Additional corridor lighting will also be installed because as per the 2009 Pedestrian Safety Study, 60% of pedestrian crashes occur at night.

The engineers involved in this project are also looking for available data regarding the crash worthiness of different median barriers.

The full presentation can be viewed at: https://www.deldot.gov/Programs/pedestrian_council/pdfs/2018/Jul/PedestrianImprovementsonRoutes13and40.pdf

Union Street Restriping Project by Sarah Lester, Director of Cornerstone West Community Development Corporation, Wilmington

A portion of Union Street in Wilmington was restriped green with the following goals: calm traffic and reduce excess speeding in the neighborhood; improve safety for pedestrians and bicyclists; add parking spaces; and increase activities for local businesses.

This project would not have been made possible without community involvement and volunteers.

The full presentation can be viewed at: https://www.deldot.gov/Programs/pedestrian_council/pdfs/2018/Oct/UnionStreetSLester.pdf



Union Street in Wilmington before and after.

SUBCOMMITTEE SUMMARIES

The three subcommittees were established in order to address each area comprehensively. Chairs of the subcommittees asked stakeholders and subject matter experts to join each of the subcommittees in order to provide additional input to the Pedestrian Council.

Built Environment Subcommittee

The Built Environment Subcommittee was created with the purpose of identifying and recommending engineering, infrastructure, land use, and transit strategies to meet the following goals:

- Identify gaps in the system of pedestrian paths and sidewalks to create continuous, interconnected pathways;
- Provide advice regarding design standards for crosswalks, sidewalks, and pathways ensuring ADA compliance;
- Provide advice regarding accessibility and connectivity to make transit a more viable option for DE citizens;
- Assist DelDOT with re-evaluation, implementation, and recommendations regarding the Statewide Pedestrian Action Plan and prioritization of pedestrian infrastructure improvements.

The Built Environment Subcommittee met three times in 2018 and continued to discuss on-going and proposed efforts related to pedestrian safety audits, median barriers and sidewalk gaps.

Members listened to the following presentations:

Philadelphia Pike Pedestrian Safety Audit by Peter Haag, DelDOT Traffic.

This audit encompassed the whole corridor from Lea Boulevard to the state line. From January 2005 to December 2015, there were 5 pedestrian fatalities, 32 pedestrian injuries and 12 bike crashes along the corridor.

Some of the reasons for pedestrian crashes in urban areas such as Philadelphia Pike include: inadequate intersection and roadway lighting; faded crosswalks, overgrown tree branches obstructing sidewalks, lack of pedestrian refuge areas for crossing roadway and sun glare affecting drivers.

Some of the short and mid term plans include: overhead lighting, installation of signs, education on pedestrian crossing safety, coordinating with area schools, Safe Route to School (SRTS) coordination, enhanced pedestrian crossing, bus stop relocation and /or coordination with DTC, and road diet.

DelDOT's ADA Self-Assessment and Transition Plan and Pedestrian Access Routes (PAR) Program Prioritization Process by Tom Nickel, DelDOT Transportation Solutions.

The PAR program was set up three years ago to assess DelDOT's responsibility in fixing existing pedestrian access routes including sidewalks, street crossings, overpasses, underpasses, etc and to upgrade Delaware's sidewalks and curb ramps to ADA standards.

It was noted that a significant percentage of sidewalks and curb ramps in Delaware do not meet the standards. The Self Assessment and Transition Plan provides a schedule and list of actions DelDOT will take to transition to full compliance with ADA requirements.

For more information on the Self Assessment and Transition Plan:

<https://www.deldot.gov/Business/ada/pdfs/DelDOTADASelfAssessmentTransitionPlan2018.pdf>

For more information on the PAR Program:

<https://www.deldot.gov/Programs/pedestrianAccessRte/index.shtml>

Striping Innovations by Linda Osiecki,
DeIDOT Transportation Solutions.

Ms. Osiecki talked about the smart paint used in the Ohio School for the Blind crosswalk. The white stripes at the edges are made with smart paint. If a visually impaired student crosses while using a cane with a sensor on the tip, the cane will vibrate when it touches the edges. The cost of paint will increase by 10% and there will be some added cost for the sensor on the cane.

She also discussed the glow-in-the-dark road markings in the Netherlands and a bike and pedestrian path located in Northern Poland. Glowing lines used luminescent paint charged by solar energy during the day and then glows when it gets dark. Ms. Osiecki mentioned that questions remain about the durability of the material used in these cases.

Town of Fenwick Island Sidewalks by Terry
Tieman, Town Manager.

Together with Ms. Tieman were Mayor Gene Langan, Council Member and Pedestrian Safety Committee Chair Vicki Carmean and Pedestrian Safety Member Bill Weistling.

Ms. Tieman talked about their efforts since 2002 to get sidewalks constructed along Coastal Highway within the town limits. DeIDOT conducted an earlier planning study but it did not progress to design and construction due to the enormous cost which included the relocation of utilities.

In 2011, the town hired Landmark Engineering to conduct another study. The cost was still unmanageable if the town would pursue it on its own.

On July 7, 2017, the Town created a Pedestrian Safety Committee. They approached DeIDOT to

revisit the older planning studies to come up with something more manageable cost-wise. They were awarded \$56,000 federal funding to which they contributed \$14,000 which were provided by Senator Gerald Ron Hocker and Representative Gray.

Ms. Carmean said that they also met with their Business Development Committee to inform them of this new development. The business sector representatives were very receptive.

Right now, due to lack of pedestrian facilities, pedestrians are forced to walk on parking lots and shoulders along with turning vehicles and bicycles. Crosswalks don't have refuges and many are not signed. They have new curb ramps but they lead to no where. At night time, it is dangerous because due to lack of lighting.

Education and Enforcement Subcommittee

The Education and Enforcement Subcommittee was created to identify and recommend pedestrian safety education and enforcement strategies towards meeting these goals:

- Develop strategies for pedestrian safety, education, and awareness;
- Assist DeIDOT with re-evaluation, implementation, and recommendations regarding the Statewide Pedestrian Action Plan.

The subcommittee met four times in 2018 and continued to brainstorm ideas to promote safe walking.

Since data suggests that majority of pedestrian fatalities were impaired, the subcommittee invited guests to their meetings for potential collaboration. They invited and had productive discussions with Lt. Jim Diana of the Division of Alcohol and Tobacco Enforcement, Cara Sawyer, Deputy

Director of the Division of Substance Abuse and Mental Health and Amy Keavis, Director of Criminal Justice and Community Partnerships, Connections.

Legislative and Policy

The Legislative and Policy Subcommittee was created to identify and recommend specific strategies regarding legislation or policies including:

- Review traffic rules to help support a safe pedestrian environment;
- Provide advice regarding implementation of DelDOT's Sidewalk and Multi-Use Path Maintenance Policy;
- Assist DelDOT with re-evaluation, implementation, and recommendations regarding the Statewide Pedestrian Action Plan.

The Legislative and Policy Subcommittee met three times this year and discussed, among other things, Share the Road Safety Class and analyzing data on fatalities and injuries to see if there is a pattern and if a targeted public outreach approach might be more effective.

They also looked at the pedestrian section of the Delaware Code Title 21 to see if improvements can be made.



2018 COUNCIL MEMBERS/ALTERNATES

Secretary Jennifer Cohan
Deputy Secretary Nicole Majeski, DelDOT

Secretary Shawn Garvin
David Bartoo, DNREC

Secretary Jeffrey Bullock
Douglas Denison, DOS

Secretary Robert Coupe
Richard Klepner, DSHS

Secretary Kara Odom-Walker
Helen Arthur, DHSS

Secretary Susan Bunting
Michael Wagner, DOE

John Sisson
Tigist Zegeye, WILMAPCO

Mayor Robin Christiansen
Reed Macmillan, Dover-Kent MPO

Todd Lawson, Sussex County Administrator

Wayne Smith
Kimberly Holmes, DE Healthcare Association

David Morris
Louie Phillips, American Heart Association

Todd Webb, DelDOT ADA Title II Coordinator

Marsha Carson, DOS ADA Title II Coordinator

Jessica Welch, Appointed by the Governor

William Jiron Jr., Appointed by the Governor

Ken Grant, AAA

William Payne, Care Giver

Built Environment Subcommittee Members

Co-Chair Linda Osiecki, DelDOT
Co-Chair Tom Nickel, DelDOT
David Bartoo, DNREC
Jared Kauffman, DTC
Jim Galvin, Dover-Kent MPO
Mark Luszcz, DelDOT
Paul Moser, DelDOT
Tom Lawless, DelDOT
William Payne, Care Giver
Tigist Zegeye, WILMAPCO

Education and Enforcement

Chair Richard Klepner, OHS
Co-Chair Peter Haag, DelDOT
Brian Clarke, DelDOT
Lt. Tracy Condon, DSP
Chip Kneavel, DelDOT
Linda Osiecki, DelDOT
Louie Phillips, AHA
Michael Wagner, DOE

Legislative and Policy Subcommittee

Chair CR McLeod, DelDOT
Lt. Tracy Condon, DSP
Ken Grant, AAA
Richard Klepner, OHS
Mark Luszcz, DelDOT
Tom Nickel, DelDOT
James Wilson, Bike Delaware
Amy Wilburn, Citizen Representative

DelDOT Support Staff

Drew Boyce, Director of Planning
Jeff Niezgoda, Assistant Director of Planning
Anthony Aglio, Planning Supervisor
Maria Andaya, Pedestrian Coordinator
Farzana Atique, McCormick Taylor

2018 Delaware Pedestrian Fatalities

In 2018, 24 pedestrians were killed on Delaware roadways. While this was a decrease from 2017, when 33 pedestrians died, it represents an alarmingly high percentage of the total number of persons killed in crashes (21.6 percent). The 2015 national average of pedestrians killed relative to the total number of persons killed in crashes was 15 percent.

Data from 2008 to 2018



PEDESTRIAN COUNCIL 2016 RECOMMENDATIONS AND UPDATES

Below are the 2018 updates to the recommendations that the Council made in 2016:

1. Recommend that DelDOT develop guidance and design standards for pedestrian median and sidewalk barriers, and prioritize locations for their use.

Median barrier or sidewalk fencing to deter pedestrians from crossing at inappropriate locations has been identified as a long-term recommendation in DelDOT's Pedestrian Safety Audits after other improvements have been completed. Other states have tried barrier/fencing at similar high-crash locations, where other engineering improvements have also been made to improve the safety and accessibility of controlled crossings and to enable pedestrians to safely reach these crossing locations. However, there is no guidance or design standards for them, or a process to prioritize locations for their use. Considerations such as context sensitive design and crashworthiness need to be included. The Legislative and Policy Subcommittee also endorsed this recommendation.

2017 Update: DelDOT planners and engineers are brainstorming and researching various median barrier ideas and designs for pedestrian safety purposes. DelDOT recently completed a study to install barriers and other safety treatment on a high pedestrian crash stretch of U.S. 13 in New Castle south of Wilmington. The project is moving forward to design this year.

Other options are also being explored, such as installation of bushes/landscaping or even the idea of simply not mowing the grass. The latter option may not be aesthetically pleasing and may elicit public opposition.

2018 Update: The US 13 Pedestrian Safety Improvements (from Route 40 to Memorial Drive) moved forward to design in 2018. DelDOT has allocated \$26 million for construction. Aside from median fencing, the project will also include additional signalized crosswalks, corridor lighting, ADA curb ramp upgrades, installation of missing sidewalk links, relocation and/or consolidation of transit stops, signing and striping, etc.

2. DelDOT create a method of publicly tracking and recording progress on implementing the complete streets policy and reporting on waivers granted.

DelDOT's Complete Streets Policy and draft implementation plan reference a waiver process and also suggest that data be collected on DelDOT's efforts to implement the policy. This recommendation is to implement these elements and provide a public tracking and reporting method.

2017 Update: DelDOT's Complete Streets Implementation Plan is still under review. This recommendation will be addressed once the plan is formally adopted.

2018 Update: No update for 2018.

3. Update the department's sidewalk maintenance policy to include a schedule of inspection. Dedicated funding and resources shall be made available for maintenance and repair of on and off-road DelDOT bicycle and pedestrian facilities.

One thing that DelDOT does well is measuring road conditions and DelDOT has a robust maintenance model in its handling of roadway maintenance. Parity of pedestrian facilities is

needed, with dedicated staffing, funding, and other resources to maintain those pedestrian facilities that DelDOT is responsible for.

2017 Update: DelDOT conducted an inventory of state maintained sidewalks several years ago through its Pedestrian Access Route Program (PAR). The sidewalks were reviewed for ADA compliance and were mapped accordingly. The map is regularly updated as new sidewalks get completed and old ones repaired/upgraded to current standards. Right now, the process of updating this map is tedious because it is done manually. However, a mobile app is now being developed that would enable responsible DelDOT personnel to make immediate updates to the map while on the field conducting inspections. In addition to this, the PAR Program is developing a prioritization process for sidewalk repairs.

The recommendation to revise the department's sidewalk policy still needs to be explored.

2018 Update: DelDOT created a Sidewalk Committee composed of representatives from different sections. The committee is developing strategies for ranking sidewalk construction and/or repairs.

4. There should be one section, with appropriate resources (e.g. staffing, funding, etc.), within DelDOT that coordinates various programs to ensure gaps in the bike and pedestrian networks are filled and resources are maximized. This section shall be responsible for ensuring project limits include key origins and destinations and are connected to the network at logical termini.

While DelDOT has an approved Complete Streets Policy and Pedestrian Accessibility Standards, DelDOT staff with multi-modal expertise and responsibilities are scattered within the agency and

are often not included in project scoping decisions or Department plan reviews until the later phase. Additionally, there is the need to keep pedestrian facility inventory information updated and to improve project coordination.

2017 Update: DelDOT's Bicycle and Pedestrian Coordinators, under the Division of Planning, are included in the department's plan distribution list. This means they get to review construction plans for all DelDOT projects starting from survey, preliminary, semi-final, and final. They also review and provide input to plans submitted by private developers through DelDOT's Development Coordination Section. They make sure that bicycle and pedestrian facilities are incorporated in all projects where required.

Other plan reviewers include planners, engineers and project managers who are knowledgeable on bicycle and pedestrian facilities and ADA requirements.

2018 Update: No update for 2018.

5. Recommend that DelDOT work with Delaware State Police (DSP), local law enforcement, Office of Highway Safety (OHS), and others to develop and conduct a "Share the Road Safety Class" and that the Pedestrian Council endorse the class as an educational supplement to pedestrian ticketing.

Based off a similar program in Portland, Oregon, that targets pedestrians, bicyclists, and vehicle drivers that are ticketed for various offenses related to pedestrian safety. This class is a one-time opportunity for offenders to have their tickets dismissed in exchange for an educational experience on how non-motorized and motorized users of the roadways should interact with each other. The class is sustained through a small fee, much cheaper than the overall cost of a ticket. Portland officials have considered their program to

be successful, although it is mostly targeted at bicyclists. This class would be voluntary for individuals ticketed.

2017 Update: *Some legislation changes need to happen to make this possible. This recommendation will be forwarded to the Legislative and Policy Subcommittee for further exploration.*

2018 Update: *DeIDOT will ask the University of Delaware Institute of Public Policy to conduct further investigation of this.*

6. Recommend that DeIDOT establish and use data-driven thresholds for targeted outreach to specific schools regarding the Safe Routes to Schools program.

As of now, Safe Routes to School improvements work on a voluntary basis or through some other improvement system. This recommendation is to establish data sets that would assist schools in determining if they have a pedestrian issue. This would allow DeIDOT to create a greater sense of urgency for needed improvements. Although ineligible for Safe Routes to Schools, this program could be expanded to high schools and universities.

2017 Update: *This recommendation is still under consideration and will be pursued pending the availability of funding and manpower. Safe Routes to School Program was created and funded in 2005 by the federal government through the Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users (SAFETEA-LU). This was replaced in 2015 by Fixing America's Surface Transportation Act (FAST) which no longer provides funding for SRTS. DeIDOT is exploring ways to keep the program going through other funding sources.*

2018 Update: *No update for 2018.*

7. Recommend that DeIDOT work with the Office of Highway Safety, Department of Education (DOE), and school districts to conduct crossing guard training prior to each school year and that the Pedestrian Council endorse the recommendation that crossing guard training be required on an annual basis for all non-law enforcement crossing guards in Delaware.

Through conversations with AAA Mid-Atlantic and with DeIDOT, it was clear that there was a gap in training for crossing guards in Kent and Sussex Counties. It is important that crossing guards know the responsibilities of being a crossing guard and can become the prime educator for teaching children how to cross the road properly. Very few school districts in these two counties have participated in free training for crossing guards, and when asked to participate earlier this year, many were non-responsive. By making training mandatory, this will eliminate this need.

2017 Update: *DeIDOT will work with AAA or DSP to initially offer some trainings this year. An evaluation of this undertaking will be conducted afterward in order to plan the next steps.*

2018 Update: *AAA conducted its first crossing guard training in Kent County at the Caesar Rodney School District on April 13, 2018.*

8. Recommend that DeIDOT work with the Office of Highway Safety, Department of Education, and school districts to consider including pedestrian safety education for school aged children.

Children 5-9 years old rank as one of the most common age groups to be hit and injured by a vehicle in Delaware. Most of these crashes are on low speed roadways limiting the severity of the injury. This is to help teach children at a younger age the proper way to behave on/around

roadways.

2017 Update: *DelDOT, OHS and DOE are still brainstorming this. For the meantime, DelDOT, through the Safe Routes to School Program, sent out letters and flyers to schools throughout the state offering tips on how to make walking safer for everyone. The letter also included a script that can be read over school announcements.*

2018 Update: *No update for 2018.*

9. Recommend that section 3.2.14 of the Defensive Driver curriculum be amended from its current language of “Pedestrian” to read “Pedestrians, including pedestrian safety, yielding to pedestrians, White Cane Law, and active traffic devices for pedestrian crossing such as HAWK signals and Rectangular Rapid Flashing Beacons.”

The current curriculum for defensive driving courses had a one word statement of “pedestrians”, which meant that any education involving pedestrians would be extremely limited. With new laws involving vulnerable users, White Cane Law, as well as pedestrian dedicated traffic signals, it is important that Delaware’s drivers be educated on how they operate.

2017 Update: *The Division of Motor Vehicle (DMV) added the recommended verbiage above to the Defensive Driving Regulation. The entire document is still under review and is expected to be made available to the public this fall.*

2018 Update: *The adoption date has been moved to August 1, 2019. DMV anticipates to have everything ready for review by March.*

10. Recommend upon request that the annual Pedestrian Council budget consider including pedestrian safety and educational materials.

Conspicuity Enhancement is an effective, science-based traffic safety countermeasure for reducing pedestrian crashes. The purpose of enhancing conspicuity for pedestrians is to increase the opportunity for drivers to see and avoid pedestrians, particularly at night. Pedestrians who are more visible are less likely to be struck. In accordance with Delaware’s Strategic Highway Safety Plan, the Delaware Office of Highway Safety has an implementation strategy in place to distribute retro-reflective materials as part of pedestrian safety and educational campaign efforts. This recommendation is for the Pedestrian Council to assist OHS by providing funding for these giveaway items.

2017 Update: *At the August 2017 meeting, the Council approved the request of OHS for the purchase of reflective t-shirts and other items for giveaways during Pedestrian Safety Awareness Month. As of December 31, 2017, \$5,700 of the Council’s fund was used towards the purchase of these items.*

2018: *The Council approved the purchase of pedestrian safety comic books by OHS at its April 2018 meeting.*

11. Adopt a Complete Streets Implementation Plan that contains the following:

- More specific recommendations related to development projects, including requirements for developers along multilane commercial corridors to provide necessary pedestrian safety infrastructure to prevent midblock crossings from occurring due to development of specific parcels. Requirements for non-motorized safety improvements on these corridors will be provided by the Safety Programs Manager or designee.
- More specific recommendations related to

school projects.

- Improved guidance regarding the selection of design speeds for non-freeway classified roadways that promote slower vehicular speeds and more compatibility with non-motorized road users.
- In the section “New Roads, Road Expansion & Roadway Redesign Projects”, add the following policy direction: “Widening projects will strongly consider and include as appropriate all pedestrian safety countermeasures including but not limited to signalized crosswalks, lighting, well placed bus stops and barriers to discourage pedestrian crossings at inappropriate locations.”
- More specific requirements for Department projects to extend the limits of Capital projects to include key pedestrian origins and destinations if necessary to ensure that these origins and destinations are connected seamlessly to safe pedestrian road crossing infrastructure.
- In addition, DelDOT will offer, on an annual basis, training regarding Complete Streets for DelDOT and/or Municipal design, construction, maintenance staff and consultants. DelDOT will define staff required to take this training.

DelDOT’s Complete Streets Policy has been in effect since 2010. However, the Complete Streets Implementation Plan is still being finalized. This recommendation is based on the fact that mid-block crashes on multilane commercial highways account for most pedestrian fatalities in Delaware. Additionally, it needs to be recognized that high speed roads are generally incompatible with pedestrian safety and comfort. The Built Environment Subcommittee also approved the training recommendation, in order to ensure that all persons tasked with implementing capital projects are aware of the policy, implementation plan, and best practices.

2017 Update: *The Complete Streets Implementation Plan, along with the above recommendations, is still under review. 2018 Update: No update for 2018.*

12. DelDOT will prioritize, fund and expand the Pedestrian Safety Audit Program to complete a minimum of three (3) corridor audits per year. Improvements shall be programmed into the Capital Transportation Plan (CTP) within one year following the completion of the audit. One or more representatives from the Delaware Transit Corporation shall participate in all Pedestrian Safety Audit Program site visits.

One of the strategies in Delaware’s Strategic Highway Safety Plan to reduce pedestrian fatalities and serious injuries is to conduct pedestrian safety audits at high-crash locations. DelDOT’s crash data review identified principal arterial roadways in New Castle County with a high concentration of pedestrian crashes.

DelDOT Traffic Safety leads the safety audits, which include the following steps: review pedestrian & bicycle crash history along the corridor; perform pedestrian observations & counts; compile existing data, including pedestrian facilities (sidewalk, pedestrian signals, etc.), bus stop locations and ridership data, roadway facilities (channelization, lighting, etc.), and vehicular and pedestrian volumes; develop existing condition maps; conduct walking tour of corridor with stakeholders; perform additional analysis to evaluate potential improvements (short and long-term); and present improvements to stakeholders for concurrence.

This recommendation is to expand the program to ensure that all high-crash corridors are evaluated and to also consider corridors with similar characteristics in order to prevent pedestrian crashes along these corridors from increasing. The Built Environment Subcommittee also approved this recommendation.

2017 Update:

1. The following Pedestrian Safety Audits were conducted in 2017:

- 1. Concord Pike (from Rocky Run Parkway to Brandywine Parkway) – completed in**

2017. This project is funded and expected to go to construction in spring 2019.

- 2. Philadelphia Pike (from State Line to Lea Boulevard) – the study is complete but final comments are being addressed.*
- 3. US 40 (from SR 72 to Buckley Boulevard) – started in 2017 and is expected to be completed in 2018.*

II. Some of the projects related to the implementation of the various pedestrian safety studies completed in recent years:

- 1. US 13/US 40 Pedestrian Safety Study (from Buckley Boulevard to SR 273). Sidewalk and barrier projects currently under design. This project is funded and expected to go to construction in FY21, although some break-out projects may go to construction sooner than that.*
- 2. US 13/DuPont Highway Pedestrian Safety Study (from SR 273 to Market/Walnut split). Accessible Pedestrian Signal/crosswalk improvements at the intersection of US 13 and Wilder Avenue were implemented in 2017. Additional recommendations are in design as part of the same project noted in the previous bullet point.*
- 3. SR 273 (from US 13 to Marrows Road). Hawk signal was installed at Georgetown Manor in 2017. There is also a project that is going to construction in 2018 that includes pedestrian facilities on SR 273 (from Airport Road to Appleby Road) and a sidewalk project going out to bid (from Old Baltimore Pike to Eagle Run Road).*
- 4. SR 48 (from West Court Drive to North DuPont Road). Study was completed in 2016. Project is funded and expected to go to construction in spring 2019.*

2018 Update:

I. The following Pedestrian Safety Audits (PSA) were conducted in 2018:

- 1. Philadelphia Pike (from State Line to Lea Boulevard) – PSA is complete and is expected to be published by spring 2019.*
- 2. US 40 (from SR 72 to Buckley Boulevard) – The bulk of the PSA is complete and expected to be finalized and published in early 2019.*
- 3. US 202, Whitby Dr. to Righter Way – PSA was completed in 2018.*
- 4. US 13, Scarborough Road to Puncheon Run Connector. PSA was started in late 2018 and planned to be completed by the end of 2019.*
- 5. SR 1, Fenwick Island – PSA started in 2018 and scheduled to be completed in 2019.*

II. Some of the projects related to the implementation of the various pedestrian safety studies completed in recent years:

- 1. US 13/US 40 Pedestrian Safety Study (from Buckley Boulevard to SR 273). Sidewalk and barrier projects are currently under design. This project is funded and expected to go to construction in FY21, although some break-out projects may go to construction sooner than that.
 - a. First pedestrian improvement project is included in Pavement & Rehabilitation (P&R) project T201606121 from Rogers Rd to Bacon/Boulden. Anticipated start of construction is Fall 2019.**

b. Planned upcoming US13 breakout projects now starting in the design phase include:

i. P&R Llangollen Blvd to Bacon/Boulden –Similar scope as T201606121

ii. US13 Median Lighting - Llangollen Blvd to I-495

iii. US13 Median Treatments - US40 to I-495

2. US 13/DuPont Highway Pedestrian Safety Study (from SR 273 to Market/Walnut split). Accessible Pedestrian Signal/crosswalk improvements at the intersection of US 13 and Wildel Avenue were implemented in 2017. Additional recommendations are in design.

3. SR 273, from US 13 to Marrows Road. Hawk signal was installed at Georgetown Manor in 2017.

a. There is also a project that started construction in 2018 that includes pedestrian facilities on SR 273 (from Airport Road to Appleby Road). This is expected to be completed in 2019.

b. A sidewalk project from Old Baltimore Pike to Eagle Run Road was completed in 2018.

4. SR 48, from West Court Drive to North DuPont Road. Study was completed in 2016. Project is funded and expected to be in construction in late 2019 or early 2020.

5. Cleveland Avenue. Task Force recommendations approved by Newark City Council in 2017. Road Diet

implemented in August 2018. Additional pedestrian upgrades at Winner Boulevard and McKees Lane currently in construction and will be completed in Spring 2019. Pedestrian upgrades at Wilbur St. are scheduled to be implemented in Summer 2019.

6. SR 2/Kirkwood Highway – Project is funded and is in design. Right-of-way needs to be acquired. Project is expected to go to construction in 2020.

7. US 13, Scarborough to Puncheon Run. Although the PSA has just started, we pre-emptively moved corridor roadway lighting to design in early 2018. Roadway lighting design is now complete. Currently finalizing agreement with City of Dover. We hope to have improved corridor lighting installed by Fall 2019.

8. Concord Pike, from Rocky Run Parkway to Brandywine Parkway – PSA was completed in 2017. This project is funded and in design. Construction is expected in 2020.

13. DelDOT Planning liaisons with each local land use agency should promote non-motorized road user safety and accessibility concerns with the land use agency when reviewing development of parcels along roads and work to incorporate necessary developer improvements to promote safe non-motorized movements.

The purpose of this recommendation is to improve DelDOT coordination with local land use agencies and to provide additional guidance to DelDOT's Development Coordination section regarding its role in implementing the Department's Complete Streets Policy.

COMPLETED RECOMMENDATIONS

2017 Update: The counties require developers to have their plans reviewed and approved by DelDOT before they can be issued permits. Following the Delaware Strategies for State Policies and Spending, DelDOT's Development Coordination Section requires that developments under Levels I and II provide shared-use-paths/sidewalks or if this is not feasible, to pay a fee-in-lieu. DelDOT sets aside these in-lieu fees for use in constructing pedestrian facilities in other places. Developments under Levels III and IV are required to provide SUPs/sidewalks if they abut an existing facility or if the proposed projects will generate a total of 2000 Average Daily Trips.

DelDOT's Bicycle and Pedestrian Coordinators also review all of these plans to make sure the required bicycle and pedestrian facilities are present. In 2017, they reviewed more than 400 plan submissions.

Additionally, DelDOT encourages local governments to think about pedestrian and bicycle travel, and transit access, in their planning related to Transportation Improvement Districts (TID). TIDs are a way of comprehensively coordinating land use and transportation between local land use agencies and DelDOT, and ensuring that developer funding is provided to complete needed projects.

2018 Update: No update for 2018.

1. Recommend that DelDOT complete and implement the ADA Transition Plan in accordance with FHWA requirements.

DelDOT is working on finalizing and obtaining Federal Highway Administration (FHWA) approval of its ADA Transition Plan. DelDOT has an obligation to alleviate all of the non-compliant features within its right-of-way. This recommendation is to prioritize the resources necessary to implement the Plan.

2017 Update: DelDOT's ADA Transition Plan has been completed but is still under review by FHWA.

2018 Update: The ADA Transition Plan was approved by the Federal Highways Administration on July 3, 2018.

2. Adopt the revised bus stop policy being prepared by the Delaware Transit Corporation that contains the following language:

- A joint DelDOT Traffic/DTC engineering review shall be undertaken for any proposed new bus stops along multilane commercial highways that are located more than 200 feet from a signalized crosswalk to determine the appropriate means of crossing pedestrians across the highway at the midblock bus stop location before the new bus stop is constructed.
- If data indicates that an existing bus stop generates midblock crossings, DTC and DelDOT will make every effort to move the bus stop to a safer location within the near vicinity or provide a safe, accessible midblock pedestrian crossing at the site of the bus stop.

DelDOT Traffic's Pedestrian/Bicycle Safety

Working Group identified a correlation between locations of pedestrian fatal crashes and high numbers of transit users getting on and off buses. Anecdotal evidence exists of bus passengers being involved in pedestrian crashes. Additionally, DTC's Bus Stop Policy has not been revised since 2000. The subcommittee thought that reviewing the policy could be an opportunity to make possible pedestrian-safety motivated revisions to ensure safe access for pedestrians, safe pull-offs for buses, and not promoting mid-block activity.

2017 Update: The revision of DTC's Bus Stop Policy has been completed.

3. Revise the state's E-Crash Form so that it automatically prompts investigating officers to provide the pedestrian trip origin and destination (if known) for pedestrian crashes. It is noted that this recommendation is currently being implemented by the Delaware Criminal Justice Information System (DELJIS) and is in production as of December 2016.

For pedestrian crashes, DelDOT Traffic's Pedestrian/Bicycle Safety Working Group identified the need for trip information. The State's "E-Crash form does not currently prompt police to provide trip information for pedestrian crashes. Engineers and others are missing a critical piece of the puzzle when analyzing pedestrian crashes because of the absence of data on trip origins/destinations for pedestrians involved in crashes.

2017 Update: Completed on December 8, 2016.

4. To reduce time and difficulties encountered when DelDOT reconstructs existing public

use pedestrian facilities crossing private property, amend Delaware Code to grant DelDOT the power and authority to temporarily trespass on private property to reconstruct existing public use pedestrian facilities to a contemporary standard.

Currently DelDOT has powers and authority to grant access to the public roadway network; has power and authority to require pedestrian facilities in the public right of way during development coordination or public works permitting activities; and has the power of eminent domain to acquire property rights for public purposes. Over the course of time pedestrian facilities have been constructed in the public right of way and standards for pedestrian facilities have evolved. DelDOT has a responsibility to the pedestrian in the public right of way and is leveraging as many resources as possible to bring pedestrian facilities to contemporary standards. When DelDOT has a proposed project, such as an alteration (pavement rehabilitation) project, DelDOT desires to remedy as many non-compliant pedestrian features as possible. When DelDOT desires to remedy pedestrian features this may temporarily affect private property owner rights. A typical process when trespassing on private property would involve a right-of-way acquisition phase which can create challenges even though the end result is a modern pedestrian facility in the public right-of-way.

2017 Update: A review of the Delaware Code revealed that DelDOT already has the authority to enter onto private land to repair and reconstruct existing facilities [17DE.C. §132(c)(13)]. Roadways, where the sidewalks are a concomitant or subsidiary element of the roadway, that have been used by the public and maintained at the public expense for 20 years can no longer be deemed private. They are deemed public roads [17DE.C. §509]. As a courtesy, DelDOT will provide written notice to the land owner prior to entering the property.